

# Agriculture to nutrition Ethiopia project



Although investment in agriculture and agricultural productivity are rapidly rising on the African continent, the rate of stunting among children has also sharply worsened—by more than 15% between 2000 and 2012 to 58.6 million children. Malnutrition undermines the health and limits the opportunities of almost 25% of people in Africa. High malnutrition rates hamper growth in gross domestic product (GDP) by as much as 12% on the continent. The United Nations puts undernutrition-related annual losses in Ethiopia at ETB 55.6 billion (USD 4.7 billion), or 16.5% of GDP (UNICEF 2009).

Ensuring the continent benefits from rising agricultural investment and productivity rates requires the introduction of interventions specifically bridging the agriculture and nutrition gap. Most governments and their respective departments of agriculture in Africa have focused on the attainment of food security—through increased productivity of staple foods—at the expense of nutritional security.

Targeted development initiatives have the potential to improve the nutrition among those most vulnerable to malnutrition. But support is needed for a new paradigm broadening the focus beyond food security. Reducing poverty, hunger and malnutrition in Africa necessitates targeted agricultural development initiatives incorporating nutrition-sensitive interventions—dietary diversity with essential proteins, minerals and vitamins and sufficient caloric intake.

## The Agriculture to nutrition project

Funded by the Bill & Melinda Gates Foundation, the Agriculture to Nutrition (ATONU) project seeks to help the African continent broaden its agricultural focus from ‘eating for hunger’ to ‘eating for health’. It focuses on how agriculture can deliver positive nutrition outcomes for smallholder farming families through the implementation of robust, evidence-based nutrition-sensitive interventions.

Working closely with the African Chicken Genetic Gains (ACGG) project—led by the International Livestock Research Institute—and the Ethiopian Institute of Agricultural Research, the ATONU project operates in 20 villages in Ethiopia (in the regions of Amhara; Oromia; Southern Nations, Nationalities, and Peoples; and Tigray) and 20 villages in Tanzania (in the central, southern highlands and eastern zones). Project interventions target 1,600 women and young children in their first 1,000 days—40 per village—where high nutritional demands of pregnancy, development and early childhood must largely be met through food grown, or income earned, on family farms in the two countries.

## Research questions

ATONU provides technical assistance to integrate tailor-made nutrition-sensitive interventions into planned and

ongoing agricultural investments. Researchers seek to help answer the following questions:

- How can agricultural interventions be designed to improve nutritional outcomes within smallholder farming families?
- What potential interventions along livestock value chains—in different contexts—will impact on the nutritional status of women of childbearing age and young children?
- Which entry points along livestock value chains will have the greatest potential impact for empowering women of childbearing age and improving child nutrition?
- How should nutrition-sensitive interventions be designed, implemented and evaluated?
- How can agriculture projects generate nutritional outcomes that benefit smallholder farming families, particularly women of childbearing age and children in the first 1,000 days?

## Objectives

Evidence linking agricultural programs to nutrition outcomes is anecdotal. This initiative specifically focuses on women of childbearing age and young children where the high nutritional demands of pregnancy, development and early childhood can largely be met through own-farm food production. The project seeks to produce:

- Robust evidence influencing decision-making at household, project/practice and policy levels (i.e. advanced knowledge and tools of how to maximize the impact of agricultural investments on nutritional outcomes).
- Increased agricultural productivity (e.g. chicken) and improved nutritional status contributing to breaking the vicious cycle of malnutrition at family and societal levels.
- The empowerment of women beneficiaries with the capacity to influence behavioural change and nutritional outcomes for their families and the wider community.
- Evidence of the importance of gender as a higher level investment priority to government, multilateral institution and civil society interventions.

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- Increased knowledge among farmers on the importance of livestock products for improving nutrition outcomes and the adoption of newly promoted behaviours at household level.

## ATONU activities in Ethiopia

The project will leverage on the ACGG activities as an entry point which has provided each participating household with 25 imported tropically-adapted chicken strains and locally-developed indigenous strains. ATONU will use this entry point to promote the consumption of chicken meat and eggs as a nutrition-sensitive intervention for farmers. Each household will also benefit from 'behavioural change communication' training administered by field staff and focusing on:

- i. Promoting nutrition and hygiene to improve consumption of diverse foods, including chickens and eggs in households.
- ii. Influencing expenditure patterns of beneficiaries on income generated from sale of chickens and eggs to ensure purchase of other/complementary nutritious foods/ to improve household diets.
- iii. Promoting gender empowerment and equity in chicken value chains to improve women's participation in joint household production, utilization and time use.
- iv. Establishing household vegetable production to improve consumption of green leafy vegetables and dietary diversity.

## ATONU partners

Each project partner—the Harvard T.H. Chan School of Public Health; the Ethiopian Institute of Agricultural Research; the Tanzania Livestock Research Institute; the Addis Continental Institute of Public Health; and Sokoine University of Agriculture—brings distinct expertise and approaches to the development of tried-and-tested tools to facilitate the identification, design, implementation and evaluation of nutrition-sensitive agricultural programs.

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